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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,641	03/15/2002	Wilbur G. Catabay	99-102/1D	4975

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EXAMINER	
KILDAY, LISA A	

ART UNIT	PAPER NUMBER
2829	

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	10/099,641	CATABAY ET AL.	
	Examiner	Art Unit	
	Lisa A Kilday	2829	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 22 October 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☒ The proposed amendment(s) will not be entered because:

   (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☒ they raise the issue of new matter (see Note below);

   (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: *See Continuation Sheet*.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *see continuation sheet*.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☒ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: *15-19*.

   Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☐ Other: _____

[illegible] GUNEO
[illegible] EXAMINER
[illegible] 2003

Continuation of 2. NOTE: The non-entered amendments include limitations that may contain new matter. The limitations found in the non-entered amendment require further search. Applicant's arguments are directed to non-entered amendment. Applicant's arguments admit that Jeng teaches that the liner layer may be a low-dielectric organic spin-on glass or silicon oxide. Applicant admits that Jeng teaches the claimed invention (pg. 9, last paragraph). On pg. 10, applicant argues five points from the final rejection. First, applicant argues that that the liner layer (22) is not a low k dielectric as defined by the instant specification. This point is not persuasive. Jeng teaches that the liner layer (22) is a low k dielectric (col. 4, lines 56-60). Furthermore, the applicant does not claim the dielectric constant of the low k dielectric. Second, the applicant argues that Jeng does not identify the liner layer (22) as a low k silicon oxide dielectric layer. This point is not persuasive. Jeng discloses that the liner layer is a low k silicon oxide dielectric (col. 1, lines 40-60; col. 4, lines 56-60). Applicants argue that it is not well known for Silicon oxide to be a low k dielectric. Applicant point is moot because applicant did not claim a dielectric constant. As discussed in Jeng, Silicon oxide has a dielectric constant of about 4.0. Jeng discloses that low k materials have a dielectric constant lower than 4.0 (col. 1, lines 40-45). A dielectric layer with a dieelctric constant of about 4.0 can be considered to fall within the range of lower than 4.0. Therefore, Silicon oxide is a low k dielectric material. Applicant argues that the Nalwa teaching that Silicon oxide has a dielectric constant in the range of about 3.8 to 4.2 does not support the examiner's argument that Silicon oxide is low dielectric material. This point is not persuasive for several reasons. Jeng discloses that low dielectric materials have a dielectric constant lower than 4.0 (col. 1, lines 44-47). Jeng discloses the use of Silicon oxide as a liner layer (col. 4, lines 56-58). Nalwa discloses that the dielectric constant of SiO2 is about 3.8-4.2 (pg. 66). Therefore, if Jeng uses Silicon oxide he is teaching that the dielectric constant of Silicon oxide is about 4.0 (col. 1, lines 41-42). However, Jeng does not teach that the Silicon oxide has a dielectric less than 4.0. However, Nalwa teaches that the dielectric constant of Silicon oxide is about 3.8-4.2. Therefore it would have been obviuos to one skilled in the art at the time of the invention to modify the process of Jeng to use a Silicon oxide layer with a dielectric constant less than 4.0 in order form a low k dielectric layer. On pg. 11, the rest of the applicant's arguments are directed to the non-entered amendment and are not considered. ..